# INDEX OF AUTHORS

Page numbers in italics refer to abstracts of papers given at a meeting of the Genetical Society and to titles of books reviewed.


Abbott, R. J., *152*
Ahloowalia, B. S., *152*
Allendorf, F. W., 247-258
Anderson, R. W., *451*
Andrews, C., *156*

Bainbridge, B. W., *447-448*, *449-450*
Bakos, J., 35-40
Barnes, B. W., *454*
Barton, N. H., 333-339, 341-359
Baumberg, S., *453*
Bedbrook, J. R., *156-157*
Begg, K. J., *452*
Bennett, M. D., 87-93, *157*
Birley, A. J., *454*
Bond, D. J., *151-152*
Box, J. F., *437-439*
Brody, T., 179-190
Bull, J. J., 361-381
Byrd, P., *153*

Callan, H. G., *155*, *158*
Campbell, J., *153*
Campbell, J. M., *454*
Casey, R., 265-272
Caten, C. E., *446-447*
Cavalier-Smith, T., *153-154*
Charlesworth, B., 41-55, 159-164, 315-331
Charlesworth, D., 19-25, 41-55, 213-218
Chater, K. G., *448*
Cornish, M. A., 95-106, 107-121, 129-136
Cove, D. J., 295-314, *449*
Csanyi, V., 35-40

Dawes, I. W., *450*
Donachie, W. D., *452*

Eaves, L. J., 399-409, *445*
Edwards, M., *153*

Fantes, P. A., *151*
Finch, R. A., 87-93
Flanagan, D., *153*
Flavell, R. B., *156-157*
Fleischer, S., (Ed) *435-436*
Foster, H. A., *451*

Gale, J. S., *454*
Ganders, F. R., 213-218
Gartside, D. F., 165-177
Genizi, A., 179-190

Harwood, C. R., *451-452*
Hatcher, L. A., *158*
Hatefi, Y., (Ed.) *435-436*
Hayward, M. D., 95-106, 107-121, 129-136
Heal, J., 229-238
Hedrick, P. W., 79-86
Hilburn, L. R., 219-228
Holden, L., 79-86
Hutchinson, J., *154*, 411-421

Jinks, J. L., 57-70, *446*
Johnson, M. S., 71-77, 137-141
Joicey, D. H., *153*
Jones, G. H., *152-153*, *157*
Jones, J., *156-157*

Karlin, S., 27-34
Kohiyama, M., (Ed.) 434-435

Lawrence, M. J., 95-106, 107-121, 123-128, 129-136, *454*
Lints, F. A., *439-441*
Littlejohn, M. J., 165-177
Lutkenhaus, J. F., *452*

MacGregor, H., *154-155*, *156*
Mackay, I. J., *454*
MacLennan, D. H., (Ed.) *435-436*
Malcolm, D., *155-156*
Malefijt, M. de Waal, 315-331
Mann, N. H., *453*
Markham, P., *449-450*
Marshall, D. F., *152*
Marson, A., *454*
Martinelli, S. D., *450*
Mather, K., 123-128
Meijer, E. G. M., *152*
Moir, A., *452-453*, *453*
Molineux, I., (Ed.) 434-435
Moriarty, J. F., *454*
Muggleton, J., 143-148

Nagy, A., 35-40
Narayan, R. K. J., *154*

Nardi, I., *156*
Nasrallah, M. E., 259-263
Newell, P. C., *448-449*
Nicholas, Y., *455*
Nurse, P., *151*

O'Donald, P., 27-34, 143-148
Old, R. W., *155*

Palmer, R. W., *158*
Parker, J. S., *158*
Partridge, G. G., 239-246
Pearce, S. M., *158*
Pelisson, A., 423-428
Piggot, P. J., *447*
Pooni, H. S., 57-70
Pugh, J. C., *153*

Rajki, K., 35-40
Raper, J. K., 27-34
Rees, H., *154*, 411-421
Rehfeldt, G. E., 383-397
Ritchie, D. A., *153*
Russell, G. J., *151*

Salmond, G. P. C., *452*
Sammons, R., *452-453*, *453*
Scheer, V., *156*
Scott, N. W., *451-452*
Seal, A. G., 411-421
Smith, C., *445-446*
Smith, D. A., *453*
Smith, R. H., 205-211
Soller, M., 179-190
Stewart, J. A. Bird, *455*
Subak-Sharpe, J. H., *151*

Taylor, A. M. R., *153*
Taylor, S., *453*
Tease, C., *152-153*
Thompson, R. D., *156-157*
Turner, J. R. G., 71-77, 273-293, *455*
Tzagaloff, A., (Ed.) *435-436*

Varley, J. M., *156*
Vezinhet, F., *450-451*

Wallace, B. M. N., *157*.
Wallace, Margaret E., 9-18
Wales, J. K., *455*
Warburg, R., *452-453*
Watson, G. F., 165-177
Wilkie, N. M., *151*
Wood, B. A., 436-437
Woolhouse, H. W., (Ed.) 433-435
Wright, A. J., 1-8
Wright, G. M., 429-431

Yonezawa, K., 191-204

# INDEX OF SPECIES

Page numbers in italics refer to the subjects of the paper.


*Abies grandis*, 385, 387
  *lasiocarpa*, 385, 387, 393-394
*Adalia bipunctata*, *143-148*
*Agropodium podagraria*, 302
*Andrena armata* (fulva), 237
*Arabidopsis thaliana*, 299, 303
*Ascobolus*, 287
*Aspergillus fumigatus*, 300
  *nidulans*, 300, *447*, *449-450*, *451*
  *rugulosus*, 300
*Atropa belladonna*, 299, 302
*Avena barbata*, *79-86*
  *sativa*, 298

*Bacillus megaterium*, 296
  *subtilis*, 447, *452-453*, *453*
*Beta oleracea*, 298
*Bombus agrorum*, 237
  *hortorum*, 237
  *lapidarius*, 237
  *lucorum*, 237
  *pratorum*, 237
  *terrestris*, 237
*Bombyx*, 290
  *mori*, 273-293
*Brassica* sp. 52, *259-263*
  *campestris*, 299, 303
  *oleracea*, *259-263*
*Briza media*, 95

*Centaurea nigra*, 235
*Cepaea hortensis*, 140
  *nemoralis*, *137-141*
*Cephalosporium acremonium*, 300
*Ceratocystis ulmi*, 447
*Chara fragilis*, 298
*Chironomus stigmaterus*, *219-228*
*Choristoneura* spp. 71, 74
*Chrysanthemum*, 315
*Clarkia*, 315
*Colius eurythane*, 75
  *philodice*, 75, 76
*Cortaderia selloana*, 218
*Cyphinus carpio*, 35-40

*Dactylis aschersoniana*, 95
*Dama dama*, *205-211*
*Datura innoxia*, 301, 302
*Daucus capillifolius*, 302
  *carota*, 302, 306
  *discolor*, 302
  *stramonium*, 302
*Diabetes mellitus*, 455
*Dictyostelium discoideum*, *448-449*
*Drosophila*, 71, 74, 145, 227, 274, 283, 287, 288, 290, 365, 366, 375
  *melanogaster*, 37, 255, 327, *423-428*, *454*
  *mojavensis*, 220
  *montana*, 255
  *pseudoobscura*, 220
  *robusta*, 227
  *willistoni*, 227
*Dryas*, 73

*Echinus*, 155
*Eristalis arbustorum*, 235
  *intricarius*, *229-238*
    (var. *furvus*), 229
  *tenax*, 229
  *nemorum*, 235
  *pertinax*, 235
*Escherichia coli*, 255, 307, 308, *451-452*, *452*, 453
*Eschscholzia california*, *429-431*

*Festuca pratensis*, 95, 96, 129, 136
*Fusarium culmorum*, 298

*Gaura*, 315
*Gayophytum*, 315
*Geocrina laevis*, *165-177*
  *Victoriana*, *165-177*
*Geotrichium candidium*, 300
*Glycine max*, 299
*Glyptotendipes barbides*, 220

*Haplopappus gracilis*, 297
*Heliconius*, *71-77*, 289
  *erato*, 72, 73, 289
  *melpomene*, 72, 73, 289
  *timareta*, 289
*Helix pomata*, 296
*Heracleum sphondylium*, 235
*Hordeum bulbosum*, 88, 91, 92, 95
  *vulgare*, *79-86*, *87-93*, 298
*Hypericum*, 315

*Isotoma*, 315, 316, 322, 328, 330
  *petraea*, 329

*Klebsiella aerogenes*, 255

*Lathyrus* sp., *154*
*Locusta migratoria*, *152-153*
*Lolium*, 154, *411-421*
  *canariense*, 411
  *loliaceum*, 411
  *multiflorum*, 411, 415, 416
  *perenne*, *95-106*, *129-136*, 152, 411, 415, 416
  *persicum*, 411
  *remotum*, 411, 415, 416
  *rigidum*, 411, 415, 416
  *temulentum*, 411, 415, 416
*Lycopersicum esculentum*, 297, 302
*Lymantria monacha*, 71, 74

*Merodon equestris*, 229, 237
*Morus alba*, 278
  *rubra*, 278
*Mus*, *9-18*, 287
*Myrothecium verrucaria*, 297
*Myxococcus xanthus*, *451*

*Nemophila menziesii* (var. *intermedia*), 217
*Neurospora*, 287, 291
  *crassa*, 37, 296, 306, 307
*Nicotiana alata*, 51
  *glauca*, 51, 298, 299, 300, 305
  *knightiana*, 299, 301
  *langsdorffii*, 42, 51, 298, 305
  *rustica*, *57-70*
  *sylvestris*, 299
  *tabacum*, 297, 301, 302, 304, 305, 307

*Oenothera*, *159-164*, 262, 315, 316, 322, 328, 329, 330
  *biennis*, 159, 163
  *organensis*, 53

*Paeonia*, 315
  *Californica*, 316
*Papaver* spp., 429
  *dubium*, *454*
  *nudicauli*, 429
  *rhoeas*, 429, *454*
*Papilio dardanus*, 289
  *glaucus*, 74, 75
  *memnon*, 289, 290
  *polytes*, 289
*Pellia epiphylla*, 433
*Penicillum chrysogenum*, 300
  *cyaneo-fulvum*, 300
  *notatum*, 300
  *roquefortii*, 300
*Petunia*, 262
  *hybrida*, 51, 299, 300, 301
  *parodi*, 300, 301
*Phalaris coerulescens*, 95
*Phaseolus*, 287
  *vulgaris*, 270
*Phycomyces blakesleeanus*, 300
*Physarum polycephalum*, *451*
*Physcomitrella patens*, 301, 304, 306, 307, *449*
*Pisum*, *265-272*
  *abyssinicum*, 266
  *fulvum*, *265-272*
  *sativum*, *265-272*, 307
*Plantago lanceolata*, 218
*Pleurozium schreberi*, 433
*Psammechinus*, 155
*Pseudotsuga menziesii* (var. *glauca*), *383-397*
*Psithyrus*, 237

*Rana esculenta*, 376
*Ranunculus acris*, 429
*Rattus norvegicus*, *239-246*
*Rhabditis belari*, 377
  *monohystera*, 92, 377
*Rhizobium legummosarum*, 307
*Rhizomnium* (*Mnium*) *punctatum*, 433
    *pseudopunctatum*, 433
*Rhodosporidium toruloides*, 300
*Rhoeo*, 316
  *spathecea*, 315
*Rubus fruticosus*, 235

*Saccharomyces carlbergiensis*, 296
  *cerevisiae*, 296, 300, 306, 307, 435, *450*
  *lipolytica*, 300
*Saccharum officinarum*, 92
*Schizosaccharomyces*, 287
  *pombe*, *151*, 300
*Schistocerca*, 273
*Sciara*, 364, 372
*Secale cereale*, 95, *156-157*
  *Silvestre*, *156-157*
*Senecio jacobaea*, 235
  *vulgaris*, *152*
Silkworm, *455*
*Solanum tuberosum*, 92, 302
*Sordaria brevicollis*, *151-152*
*Sphaerocarpus donnellii*, 300
*Spinacea oleracea*, 306
*Staphyloccus aureus*, 453
*Stethophyma grossum Mecostethus grossus*, *157*
*Streptomyces*, 297, *448*
  *coelicolor*, 448
  *violaceus*, 297
*Strongylocentrotus*, 155

*Tetrahymera*, 434
*Thuja occidentalis*, 385, 387
*Tortula papillosa*, 433
  *robusta*, 433
*Tribolium*, 287
*Trifolium*, 273
  *hybridium*, 51
  *repens*, 51

*Triticum aestivum*, 157, 298
*Triturus cristatus*, 156
*carnifex*, 155
*marmoratus*, 156
*Tsuga heterophylla*, 385, 387, 388, 393

*Ustilago hordei*, 447

*Vaucheria dichotoma*, 306
*Vicia faba*, 265, 299
*Vigna sinensis*, 307
*Volucella bombylans*, 229, 235, 237

*Xenopus*, 155

*Zea mays*, 298
*Zygaena*, 289

# INDEX OF SUBJECTS


activity of extra DNA in *Lolium*, 411-421
assortative mating, 27-34, 399-409

bivalent interlocking in newt male meiosis, 158
bleomycin, effect of, on chromosomes of AT cells, 153

centromere arrangements in *Triticium*, 157
Chiasma control, components of, 158
chromosome pairing, incomplete and restriction of chiasmata, 157
Chylous ascites in mice, 9-18
cline, effect of, as barrier to gene flow, 333-339
colour patterns of *Syrphidae*, 229-238
crosses of inbred lines, distribution of marker-linked quantitative effects, 179-190
cytogenetics of *Chironomus*, 219-228
cytoplasmic-genic male sterility, 213-218

differential coefficients, use of in genetic models, 1-8
DNA, activity of supplementary, in *Lolium*, 411-421
  highly repetitive and chromosome 1 in newts, 156
  sequences to RNA sequences, hybridisation of, 155
  variation among flowering plants, 154
dosage compensation, lack of, in butterflies, 71-77
duplicate gene expression by natural selection, 247-258
dynamics of hybrid zones, 341-359

ecological adaptations in Douglas-fir, 383-397
estimation of linkage, 107-121, 123-128
eukaryote DNA and C-value, 153-154, 154-155
evolution of male haploidy, 361-381
  of translocation heterozygosity, 315-331
  of S-alleles, 41-55

gametic lethals and S-alleles, 159-164
gene flow, 333-339
gene frequencies at the S-locus in *Papaver*, 454
gene-gene interactions in cell cycle, 151
genetic analysis in carp, 35-40
  of induced variations, 191-204
  of plasmodium formation, 451
  of wall synthesis in fungi, 450-451
genetic background and primary trisomy in ryegrass, 152
genetic control in diploid *Lolium*, 95-106
  of chylous ascites in mice, 9-18
  of recombination in silkworms, 273-293
genetic models, use of differential coefficients in interpretation of, 1-8
genetic variation for enzyme activity in *drosophila*, 454
  in legumin from *Pisum*, 265-272
genetics of gynodioecy, 213-218
genome size and chromosome form, 154
  substructure of Herpes Simplex virus, 151
genotype-environment interaction, 57-70
genotype frequencies in incompatibility systems, 19-25
gynogenesis in carp, 35-40

higher order states of chromatin, 155-156
hitch-hiking in barley and oats, 79-86
hybrid dysgenesis in *Drosophila*, 423-428
hybrid zone in *Geocrinia*, 165-177
  zones, dynamics of, 341-359

inbreeding in polygynous animals, selection for, 205-211
incompatibility antigens and S gene expression in *Brassica*, 259-263
induced continuous variation of self-fertilising plants, 191-204
intercross family, linkage from, 107-121, 123-128
inheritance of allozymes in *Cepaea*, 137-141

legumin, genetic variation in, 265-272
linkage, simultaneous estimation of, 107-121

male haploidy, evolution of, 361-381
marker-linked quantitative effects, 179-190
meiosis in barley, action of triploid inducer on, 87-93
meiotic aneuploidy, chemical induction of, in *Sordaria*, 151-152
multigenic control of recombination, 455
multilocus incompatibility systems, 19-25
mutants, developmental of *Myxococcus*, 451
  morphology of, in *Escherichia coli*, 451-452
  use of, in *Bacillus subtilis*, 452-453

natural selection, duplicate gene expression by, 247-258
in *Papaver*, 454
newt lampbrush chromosomes, 155
nuclear DNA variation in flowering plants, 154

polymorphism in ladybirds, 143-148
population genetics of *chironomus*, 219-228
primary transcripts, size of, and heterogenous nuclear RNA, 154-155
photoplasts in plant genetics, 295-314

quantitative genetics and animal improvement, 445-446
breeding of fungi, 444-447
human behaviour, 445
plant breeding, 446

*rayed* gene locus in *Senecio vulgaris*, 152
recombination in silkworms, 273-293
of phage TI DNA molecules, 153
resistance to warfarin in rats, 239-246
response thresholds and genotype-environment interactions, 57-70

S-alleles, evolution and breakdown of, 41-55
S and Z alleles in ryegrass, 129-136
S gene antigens in *Brassica*, 259-263
selection for gamete lethals and S-alleles, 159-164
in polygynous animals, 205-211
self-incompatibility in *Eschscholzia*, 429-431
ryegrass, 95-106, 129-136
sex-linked enzyme in butterflies, 71-77
structure of a hybrid zone in *Geocrinia*, 165-177

translocation heterozygosity, evolution of, 315-331
threshold models and *Diabetes mellitus*, 455
triploid inducer in barley, 87-93
twins, use of, and assortative mating, 399-409

variability of Ribosomal RNA genes, 156

warfarin resistance, 239-246